broady transverse. Labrum hidden. The upper tooth of mandibles much longer than the lower. Palpi longer than usual. Areolet 4-angled, the nervures uniting above; there is a short stump of a nervure on the disco-cubital; the transverse basal nervure is interstitial. Petiole long, the post-petiole not much widened. Gastrocœli shallow, widely separated. Legs moderately long; the tarsi much longer than the tibiæ and sparsely spined. Antennæ long, distinctly dilated towards the apex. Eyes large, parallel, reaching below the middle of the face, the malar space being less than the length of the scape of the antennæ.

Comes near to Charitojoppa and Xenojoppa.

(To be continued.)

# NEW CULICIDÆ FROM THE FEDERATED MALAY STATES.

## By FRED. V. THEOBALD, M.A.

(Continued from p. 113.)

### Genus Hulecoeteomyia, n. gen.

Head mostly covered with flat scales, but there is a pronounced median area of narrow-curved scales, which also exist along the nape and around the eyes. Palpi short in the female; in the male the palpi are long, but *shorter than the proboscis*, thin and devoid of hairtufts; the apical joint about half the length of the penultimate. Scutellum with a rosette of flat and somewhat spindle-shaped scales to mid-lobe, scattered ones of similar form on lateral lobes; prothoracic lobes with small flat scales; fork-cells small.

This genus can at once be told by the cephalic characters, and by the scutellar scales, which, as pointed out by Dr. Leicester, differ entirely from those in *Stegomyia*. I have not yet detected any scales in the *Culicina* like those of the scutellum in this genus; they are somewhat difficult to make out in form, but apparently are all rounded apically, not pointed as in true spindle-shaped scales.

A single species has so far only been taken. They might easily be mistaken for Stegomyias unless microscopically examined.

#### HULECOETEOMYIA TRILINEATA, Leicester, n. sp.

"Thorax rich brown, with three narrow golden lines, the median one entire, the lateral broken before the roots of the wings. Abdomen black, with pearly white lateral basal spots in the female, with narrow white bands in the male. Legs black, basally pale-banded, most prominently on the hind legs. Fork-cells short. Male palpi about four-fifths the length of the probose is.

" 2. Head black, clothed with flat black scales and numerous upright black forked scales; there is a line of narrow-curved scales,

creamy vellow in colour, running down the centre and along the orbital margins, and behind over the nape, scattered among the flat black scales, are a few white narrow-curved ones; laterally there is a patch of white flat scales succeeded by black scales, which are followed again by white scales; on the vertex, projecting forwards between the eyes, is a tuft of pale golden bristles; there are other bristles along the orbital margins which are black at the base and pale at the tip. Antennæ with the basal joint dusky black, with small black spindleshaped scales on its inner face (in some specimens this joint is ferruginous). remaining joints black; second joint black-scaled; verticillate hairs black; all the joints after second clothed with short silky white hairs. Clypeus black, frosted. Palpi yellowish-brown, four-jointed; first joint constricted in the middle; fourth joint very small, clothed with black spatulate scales except towards the tip, which is whitescaled. The amount of this white scaling varies. In one specimen it includes little more than the last joint, in another one it includes half the penultimate joint. Proboscis yellowish-brown, black-scaled dorsally and laterally; beneath it is white-scaled; about half way white scales appear laterally, and may even go right round, forming a complete band. Prothoracic lobes simple, prominent, white-scaled. Mesonotum dark brown, clothed with narrow-curved scales, black under a hand lens, but under a two-thirds power the tips appear pale golden; there is a central line of pale golden scales which forks in front of the scutellum, enclosing an unscaled area; on either side there is another line which runs back about one-third the total distance; placed a little further out is another line running forwards from the scutellum and ending just a little to one side of the anterior lateral line; there is another golden line over the roots of the wings, and on the anterior margin, just above the prothoracic lobes, are scattered white scales; there are numerous black bristles arranged in lines. The scutellum is fawny brown; on the central lobe there is a patch of black almost spindle-shaped scales arranged in a rosette, with a central line of creamy white scales which become narrow-curved scales at the apex of the scutellum : the lateral lobes have a few black narrow-curved scales. The scutellum is not heavily scaled, and the scales are quite unlike those of an ordinary Stegomyia; there are four to six bristles on the central lobe, two of which are pale golden, four black. Pleuræ dark brown, with patches of broad white scales. Wings clad with black scales ; median scales rather long and narrow spatulate-shaped ; lateral scales lanceolate; some white scales on the costa at its base. Fork-cells of moderate length; first submarginal longer and narrower than second posterior, its base nearer the base of the wing, the cell longer than its stem. Supernumerary and mid cross-veins meeting at an angle; posterior cross-vein twice its own length from mid crossvein. Legs with the coxæ creamy yellow; femora of fore and mid legs black-scaled dorsally and laterally, white-scaled beneath; a ring of golden brown spines around the apex; tibiæ the same as femora minus the spines, except that the extreme apex is clothed with a few creamy yellow scales; metatarsus and first tarsal joint basally banded with creamy yellow, the remainder black-scaled; ungues equal and uniserrate; hind femora scaled as the others, except for a patch of white scales about the middle of the anterior and posterior surfaces; knee spot creamy; tibia entirely black-scaled, with four lines of short white spines running down its whole length; metatarsus basally banded; first two tarsal joints very broadly basally banded with creamy white. Ungues equal and simple. Metanotum dark chestnutbrown. Halteres with black-scaled stems and white-scaled knobs. Abdomen black-scaled; a few white scales at the bases of the segments after the second, but scarcely amounting to basal banding in some specimens; laterally there are triangular patches of white scales, and ventrally the segments are basally banded white.

" $\mathcal{J}$ . Head as in the female; the antennæ have pale internodes and dark nodes; the two last joints are very long; verticillate hairs long and black; palpi about four-fifths the length of the proboscis, dirty white, black-scaled ; a naked area in the middle of second joint which shows white under a lens; white scales, which may or may not form a complete band, at the apex of the second and third joints; these scales may involve both sides of the joint-they are variable. Proboscis long, black-scaled, with a narrow band of white scales about its centre. The thoracic scaling is the same as in the female, and the leg scaling also. Wing scaling similar but not so heavy. Abdominal banding more marked, all the segments showing fairly broad basal white bands and large lateral spots. The penultimate segment shows a dorsal patch of white scales with a pearly lustre. The fore and mid ungues large, unequal, larger tooth biserrate. Length, female, 5 mm.; male, 4 mm."

Time of capture.--April. Habitat.-Kuala Lumpur.

(To be continued.)

### NOTES AND OBSERVATIONS.

BRITISH DIPTERA WANTED .- I should be much obliged if anybody would send me fresh or recent specimens, for examination and description. of :---

Xylomyia varia, Meig. (male and female), and X. marginata, Meig. (female).

Beris geniculata, Hal. I know the female of the species, which is distinct from B. fuscipes, but I have not seen a male.

Sargus. Any yellow-legged species except S. flavipes; also S. nubeculosus (male), if such a thing exists.

Pachygaster minutissima, Zett.

Stratiomys furcata, Fall. I cannot distinguish what I have seen from S. riparia.

Odontomyia. Any species except O. ornata, tigrina, and viridula. I expect three or four species unknown to me occur in Britain.

Oxycera dires, Lw. (female), and O. falleni, Staeg.

Nemotelus brevirostris, Meig. I fear all ours are N. nototus, Zett.

Leptis conspicua, Meig. Said to be common in some places, but although I can distinguish Syrphus ribesii and vitripennis by the naked р

ENTOM.-JUNE, 1904.